



# Rio Verde Area Drainage Master Plan

## Factsheet for Drainage Guidelines for Single-Lot Development

### Current Requirements

In Maricopa County, when you buy property and wish to build a structure on it, there are certain requirements that must be met. The same is true if you want to make changes to your existing structure. You must abide by the County Drainage or Floodplain Regulations when developing your property.

The Maricopa County Department of Planning and Development is responsible for processing applications for land-use approvals, zoning and land-use permits, construction and building permits, and engineering and subdivision permits in unincorporated Maricopa County.

### Drainage Clearance

As part of this permitting process, a Drainage Clearance must be obtained from the Flood Control District of Maricopa County (District). A drainage clearance must be obtained for the construction of any structure, wall or fence and before any grading occurs on a lot or parcel. The District reviews each permit/drainage clearance application to make sure that it complies with the County drainage and floodplain regulations and to determine if the District has any flood-related concerns.

### About Drainage Guidelines

These guidelines were developed to help property owners minimize drainage and flooding problems occurring in the Rio Verde area due to the cumulative impacts of single -lot development. Rio Verde is characterized by steep slopes, erodible soils, desert vegetation, shallow braided channels, and sheet flow – all of which contribute to flooding, erosion, and drainage problems.

These guidelines, when followed along with the County Drainage Regulations and Floodplain Regulations, will help Rio Verde develop naturally and reduce the number of drainage problems. The guidelines will be used as a tool by District staff when reviewing sites for a drainage clearance. As the District develops more technical data in the Rio Verde Area Drainage Master Plan (ADMP), these guidelines will move towards policy and regulation. The drainage guidelines have been attached for your convenience.

### Grandfathered Improvements

Improvements that have already been permitted as of May 2003, or were completed before permits were required are “grandfathered” in and are not required to meet these guidelines. However, if new improvements (structures or fences) or additional grading is proposed for a lot with existing improvements, new retention, perimeter wall modifications, or other measures may be required to prevent or minimize drainage problems from occurring on that lot or adjacent property.

### Engineered Plans

The Drainage Regulations require a registered Arizona Civil Engineer to prepare engineered plans if there is extensive grading, an encroached upon or rerouted wash, or a finished floor elevated less than one-foot above adjacent grade.

Because of the numerous washes, sheet flow conditions, and highly erosive soil all development in the Rio Verde area should have engineered plans in order to obtain a Drainage Clearance from the District.

## **Disturbing Washes**

The washes in Rio Verde are vital to the natural balance of the area. The disturbance of washes causes significant soil erosion and deposition in the area. Major washes (5 feet or greater in width) should not be disturbed. This includes grading, grubbing, or relocating. Disturbance of secondary washes (less than 5 feet in width) should be avoided if possible.

## **Disturbance of Area**

The District recommends minimal grading and grubbing (removal of vegetation) of lots. When the ground is graded and the vegetation removed, the water runoff increases and the potential for soil erosion also increases. The District recommends property owners limit the amount of disturbed areas. The maximum amount of disturbed area should be 40 percent of the total lot size. If a property owner grades or grubs more than 40 percent of a lot, then retention should be provided to decrease the amount of flow and/or the velocity as the water exits the lot.

## **Walls and Fences**

Although the County Department of Planning and Development only requires a building permit for walls and fences over the height of six feet, the District currently requires a Drainage Clearance for all walls and fences constructed in unincorporated Maricopa County. Fences often divert stormwater flow onto other people's properties and are one of the main sources of nuisance flooding and drainage problems.

In the guidelines, solid walls and wire mesh type fences should not be used for perimeter fencing. The guidelines offer more detailed information on what is and isn't allowed.

## **Finished Floor Elevation**

For lots not located in the floodplain, finished floors of all structures should be elevated to a minimum of 1.5 feet above the highest natural adjacent grade. For lots located in a District regulated floodplain, the floodplain regulations still apply for the building's finished floor.

## **Contact Us**

If you have questions on the Rio Verde Drainage Guidelines for Single-lot Development, contact:

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